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WO 02/089836 A1

(54) Title: CANCER METASTASIS INTERFERING VACCINE

(57) Abstract: A vaccine that has been synthesized by a polyvalent substrate and the idiotype parts of antibodies that recognize antimetastatic peptides. The vaccine induces the production of antiidiotype antibodies that inhibit metastasis formation. It is known that the ability of a cancer cell to metastasize is primary dependent by its property to bind with extracellular matrix proteins such as laminin and fibronectin. On these proteins the antimetastatic sequences (peptides) YIGSR and RGD have been discovered since 1991. Attempts to use these peptides either per se or as constituents of polymers in order to inhibit spontaneous metastasis in experimental animals had only limited results because of the limited life time of this preparation in the circulation. Using the described vaccine the immune system is leaded to the production of antiidiotype antibodies that have shape and properties similar to the antimetastatic peptides YIGSR and RGD. Pilot experiments indicated that these antibodies can inhibit the formation of spontaneous metastasis in experimental animals.